

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-15 (cancel)

16. (New) A gas burner type combustion device which projects a mix of air and gas inflamed at the outlet of a pipe, the burner comprising:

a main body 100 having: 1) an upper end 110 fitted with a gas inlet in the form of a coupling 111 and 2) a lower end 120 which opens out to allow an inflamed gas and air mix to escape to create a flame;

a movable diffusion cone 200 located at the lower end 120, the diffusion cone 200 having a tip 210 located at least upstream from a flame creation zone to ensure the bursting of the air and gas mix,

wherein the movement of the cone 200 permits the variation in strength of the flame.

17. (New) The device according to claim 16, wherein the cone (200) deploys or retracts so that the diameter of the base of the cone (200) changes during the operating of the burner (B) according to the usage of the burner (B) so that the flame takes on the deployed or retracted shape of the cone (200) whilst in operation.

18. (New) A device according to claim 16, wherein the cone (200) further comprises a lower part (220), wherein the lower part includes a plurality of blades (221) articulated in relation to the tip so as to move from a deployed position to a retracted position and vice versa.

19. (New) A device according to claim 17 wherein the opening and closing of the cone (200) as well as its relative displacement in relation to the body (100) of the burner (B) are actuated by the relative controlled displacements of at least one control rod (300).

20. (New) A device according to claim 19, further comprising a spacer (330) located on the inside of the cone (200) and constantly touching the blades (221), wherein the spacer is connected to said control rod (300) whose actuation ensures the displacement of said spacer (330) and the deployment or retraction of said blades (221).

21. (New) A device according to claim 20, wherein the spacer (330) is in helical connection with said rod (300) whose rotation ensures the displacement of said spacer (330) on the inside of the cone (200).

22. (New) A device according to claim 18, wherein the blades (221) overlap, one blade over the other irrespective of their position.

23. (New) A device according to claim 16, wherein the cone (200) co-operates with a fixed nozzle tip (121) located at the lower end (120) of the burner (B).

24. (New) A device according to claim 16, of the type used for thermal weed killing, further comprising a bell cover (400) coaxial to the axis of diffusion of the flames, wherein the bell cover is constituted by an external cylindrical surface (410) with the purpose of maintaining a safety perimeter around the burner (B) and by a horizontal surfaces (420) to maintain the hot air above the contact point of the ground with the flames.

25. (New) A device according to claim 24, wherein said bell cover (400) is rotary mounted in a moveable manner in relation to the body (100) of the burner (B) along the axis of the burner (B).

26. (New) A device according to claim 16 of the type used for thermal weed killing, wherein the burner (B) is associated to at least one wheel (600) by means of an arm (610) itself swiveling at least around the vertical axis defined by the burner (B).

27. (New) A device according to claim 16 of the type used for thermal weed killing, wherein the burner (B) further comprises a protector (700) located at the lower end.

28. (New) A device according to claim 23, wherein the fixed nozzle tip (121) and the diffusion cone take a different conical shape or a different slope.

29. (New) A device according to claim 23, wherein the upper end (110) of the body (100) of the burner (B) is constituted by a sphere (112) which comprises openings to allow at least the injection of gas and the intake of air.

30. (New) A method of operating, within the scope of thermal weed killing, of a gas burner (B) type device having: a main body 100 having: 1) an upper end 110 fitted with a gas inlet in the form of a coupling 111 and 2) a lower end 120 which opens out to allow an inflamed gas and air mix to escape to create a flame; a movable diffusion cone 200 located at the lower end 120, the diffusion cone 200 having a tip 210 located at least upstream from a flame creation zone to ensure the bursting of the air and gas mix, wherein the movement of the cone 200 permits the variation in strength of the flame, the method is associated with means for detecting a foliar spectrum and comprises:

increasing or reducing the strength or shape of the flames via respectively displacing or opening and closing the cone (200) according to the increase or reduction in the detected foliar spectrum.